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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,949	03/25/2004	Robert Aigner	068758.0180	6346
31625	7590	07/27/2005	EXAMINER	
BAKER BOTTS L.L.P. PATENT DEPARTMENT 98 SAN JACINTO BLVD., SUITE 1500 AUSTIN, TX 78701-4039			TUGBANG, ANTHONY D	
			ART UNIT	PAPER NUMBER
			3729	

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/808,949

Applicant(s)

AIGNER ET AL.

Examiner

A. Dexter Tugbang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 3-40 is/are pending in the application.
- 4a) Of the above claim(s) 3-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment*

1. The applicant(s) amendment filed on 5/6/05 has been fully considered and made of record.

### *Election/Restrictions*

2. Claims 3-30 continue to stand as being withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 1/5/05.

3. Newly submitted Claims 31-40 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

Claim 31 is directed to Species B;

Claims 32-36, 38 and 39 are directed to Species C;

Claim 37 is directed to Species D; and

Claim 40 is directed to Species E.

The various Species were discussed in the Office Action (Election/Restriction, dated 12/14/04) in Paragraph 5.

NOTE: In the amendment filed on 5/6/05, the limitations of Claim 2, along with other new limitations, were incorporated into Claim 1. Thus, Claim 1 is no longer a generic claim, but is directed specifically to Species A.

Since applicant has received an action on the merits for the originally presented invention (i.e. Species A), this invention has been constructively elected by original presentation for

prosecution on the merits. Accordingly, Claims 31-40 have been withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Seipler et al 6,263,550 in view of Berlincourt et al 3,590,287.

Seipler discloses of producing a piezoelectric component comprising: providing a substrate (layer 3 in Fig. 1); producing a bottom electrode (anyone of conductive layers 5<sub>3</sub>, 6<sub>3</sub>, 7<sub>3</sub>) on the substrate 3 from a first electrically conductive layer applied on the substrate (see col. 2, lines 46+); applying a layer stack on the substrate in a region of the bottom electrode, in which the layer stack comprises, beginning as bottommost layers; a first piezoelectric layer 2, a second electrically conductive layer (anyone of conductive layers 5<sub>2</sub>, 6<sub>2</sub>, 7<sub>2</sub>), a second piezoelectric layer 1 and a third electrically conductive layer (anyone of conductive layers 5<sub>1</sub>, 6<sub>1</sub>, 7<sub>1</sub>); producing a first opening (anyone of holes 17<sub>1</sub>, 18<sub>1</sub>, 19<sub>1</sub>) in the third electrically conductive layer; producing second openings (anyone of holes 11<sub>1</sub>, 12<sub>1</sub>, 13<sub>1</sub>) in the third electrically conductive layer; and contact connecting the third electrically conductive layer through stacking and filling (see col. 3, lines 66+).

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While Seipler does teach that various stacked layers are produced, Seipler does not mention that the stacked layers produce at least two stacked crystal filters.

Berlincourt teaches that stacked layers of electrically conductive layers and piezoelectric layers are piezoelectric components that can be utilized in applications of resonator and crystal filter applications (see col. 1, lines 18-36).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized the stacked layers of Seipler as two stacked crystal filters, as taught by Berlincourt, to positively utilize the piezoelectric component in resonator and crystal filter applications.

### ***Response to Arguments***

6. Applicant's arguments with respect to Claim 1 have been considered but are moot in view of the new ground(s) of rejection.

It is noted that the new grounds of rejection above is necessitated by the added new limitations of "producing at least a first opening in the third electrically conductive layer" (lines 10-11 of Claim 1) and "producing second openings in at least the third electrically conductive layer" (lines 12-13 of Claim 1).

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

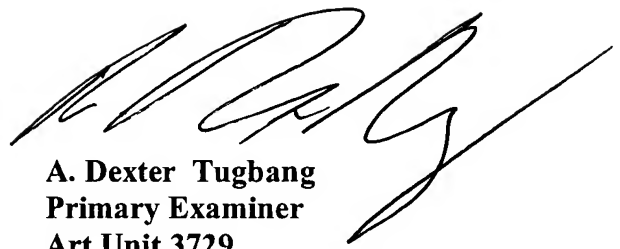
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Dexter Tugbang whose telephone number is 571-272-4570.

The examiner can normally be reached on Monday - Friday 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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**A. Dexter Tugbang**  
**Primary Examiner**  
**Art Unit 3729**

July 24, 2005